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1108

OIPE

#2

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/978,273

DATE: 11/01/2001

TIME: 14:00:35

Input Set : A:\9341027999.txt

Output Set: N:\CRF3\11012001\I978273.raw

ENTERED

3 <110> APPLICANT: Thomas, Christopher
4 McPherson, Michael
5 Atkinson, Howard
6 Neelam, Anil
8 <120> TITLE OF INVENTION: Plant Cell Death System
10 <130> FILE REFERENCE: 9341-027
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/978,273
C--> 12 <141> CURRENT FILING DATE: 2001-10-15
12 <150> PRIOR APPLICATION NUMBER: 0025225.4
13 <151> PRIOR FILING DATE: 2000-10-14
15 <160> NUMBER OF SEQ ID NOS: 18
17 <170> SOFTWARE: PatentIn Ver. 2.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 909
21 <212> TYPE: DNA
22 <213> ORGANISM: Zea mays
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26 <222> LOCATION: (1)..(48)
27 <223> OTHER INFORMATION: N-terminal Domain
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32 <223> OTHER INFORMATION: C-terminal Domain
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35 <221> NAME/KEY: misc_feature
36 <222> LOCATION: (484)..(558)
37 <223> OTHER INFORMATION: Central Domain
39 <220> FEATURE:
40 <221> NAME/KEY: mutation
41 <222> LOCATION: (226)..(231)
42 <223> OTHER INFORMATION: Sequence replacing removed SacI site
44 <220> FEATURE:
45 <221> NAME/KEY: misc_feature
46 <222> LOCATION: (1)..(3)
47 <223> OTHER INFORMATION: Initiation codon added via PCR primer
49 <220> FEATURE:
50 <221> NAME/KEY: misc_feature
51 <222> LOCATION: (904)..(909)
52 <223> OTHER INFORMATION: Stop codons added via PCR primer
54 <220> FEATURE:
55 <221> NAME/KEY: misc_feature
56 <222> LOCATION: (1)..(24)
57 <223> OTHER INFORMATION: Binding site for primer ProRIPBF
59 <220> FEATURE:
60 <221> NAME/KEY: misc_feature
61 <222> LOCATION: (205)..(249)

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66 <222> LOCATION: Complement((205)..(249))
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70 <221> NAME/KEY: misc_feature
71 <222> LOCATION: Complement((880)..(909))
72 <223> OTHER INFORMATION: Binding site for primer ProRIPSR
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75 <221> NAME/KEY: misc_feature
76 <222> LOCATION: (49)..(73)
77 <223> OTHER INFORMATION: Binding site for primer RIP1BF
79 <220> FEATURE:
80 <221> NAME/KEY: misc_feature
81 <222> LOCATION: Complement((837)..(864))
82 <223> OTHER INFORMATION: Binding site for primer RIP2SR
84 <220> FEATURE:
85 <221> NAME/KEY: misc_feature
86 <222> LOCATION: (463)..(579)
87 <223> OTHER INFORMATION: Binding site for primer RIPCDF spanning central
88     domain
90 <220> FEATURE:
91 <221> NAME/KEY: misc_feature
92 <222> LOCATION: Complement((463)..(579))
93 <223> OTHER INFORMATION: Binding site for primer RIPCDF spanning central
94     domain
96 <400> SEQUENCE: 1
97   atggccgaga taaccctaga gccgagtgat cttatggcgc aaacaaacaa aagaatagtg 60
99   ccaaagtcca ctgaaatctt ccccggtggag gacgcgaact acccttacag cgccttcac 120
101  gcgtcggtcc ggaaagacgt gatcaaacac tgcaccgacc ataaagggat cttccagccc 180
103  gtgctgccac cggagaagaa ggtcccggag ctatggttct acacagaact gaaaactagg 240
105  accagctcca tcacgctcgc catacgcgtg gacaacctgt acctcgtggg cttcaggacc 300
107  ccgggcccggg tgtggtggga gttcggcaag gacggcgaca cccacctcct cggcgacaac 360
109  cccaggtggc tcggcttcgg cggcaggtac caggacctca tcggcaacaa gggctctggag 420
111  accgtcacca tgggcccgcg cgaaatgacc agggccgtca acgacctggc gaagaagaag 480
113  aagatggcga cactggagga ggaggaggtg aagatgcaga tgcagatgcc ggaggccgct 540
115  gatctggcgg cggcggcagc ggctgaccca caggccgaca cgaagagcaa gctggtgaag 600
117  ctggtggtca tgggtgtgca ggggctgcgg ttcaacaccg tgtcccgcac ggtggacgcg 660
119  gggttcaaca gccagcacgg ggtgaccttg accgtgacgc aggggaagca ggtgcagaag 720
121  tgggacagga tctccaaggc ggccttcgag tgggctgacc accccaccgc tgtgatcccc 780
123  gacatgcaga agcttggtcat caaggataag aacgaagcag cgaggatcgt tgcgctcgtt 840
125  aagaatcaaa ctactgccgc tgccgctact gctgccagtg ctgacaacga cgacgacgag 900
127  gcctaataa
131 <210> SEQ ID NO: 2
132 <211> LENGTH: 750
133 <212> TYPE: DNA
134 <213> ORGANISM: Zea mays
136 <220> FEATURE:

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137 <221> NAME/KEY: misc_feature
138 <222> LOCATION: (1)..(3)
139 <223> OTHER INFORMATION: Initiation codon added via PCR primer
141 <220> FEATURE:
142 <221> NAME/KEY: mutation
143 <222> LOCATION: (181)..(186)
144 <223> OTHER INFORMATION: Sequence replacing removed SacI site
146 <220> FEATURE:
147 <221> NAME/KEY: misc_feature
148 <222> LOCATION: (745)..(750)
149 <223> OTHER INFORMATION: Stop codons added by PCR primer
151 <400> SEQUENCE: 2
152   atgaaaagaa tagtgccaaa gttcactgaa atcttccccg tggaggacgc gaactaccct 60
154   tacagcgcct tcatcgcgtc ggtccggaaa gacgtgatca aacactgcac cgaccataaa 120
156   gggatcttcc agcccggtgct gccaccggag aagaaggtcc cggagctatg gttctacaca 180
158   gaactgaaaa ctaggaccag ctccatcacg ctcgccatac gcatggacaa cctgtacctc 240
160   gtgggcttca ggaccccggg cggggtgtgg tgggagttcg gcaaggacgg cgacaccac 300
162   ctctcgggcg acaaccccag gtggctcggc ttcggcggca ggtaccagga cctcatcggc 360
164   aacaagggtc tggagaccgt caccatgggc cgcgccgaaa tgaccagggc cgtcaacgac 420
166   ctggcgaaga agaagaaggc ggctgaccca caggccgaca cgaagagcaa gctggtgaag 480
168   ctggtggtca tgggtgtgca ggggctgcgg ttcaacaccg tgtcccgcac ggtggacgcg 540
170   gggttcaaca gccagcacgg ggtgacctg accgtgacgc aggggaagca ggtgcagaag 600
172   tgggacagga tctccaaggc ggcttcgag tgggctgacc accccaccgc tgtgatcccc 660
174   gacatgcaga agcttggcat caaggataag aacgaagcag cgaggatcgt tgcgctcgtt 720
176   aagaatcaaa ctactgccgc tgcctaataa                               750
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181 <211> LENGTH: 444
182 <212> TYPE: DNA
183 <213> ORGANISM: Zea mays
185 <220> FEATURE:
186 <221> NAME/KEY: misc_feature
187 <222> LOCATION: (1)..(3)
188 <223> OTHER INFORMATION: Initiation codon added by PCR primer
190 <220> FEATURE:
191 <221> NAME/KEY: mutation
192 <222> LOCATION: (181)..(186)
193 <223> OTHER INFORMATION: Sequence replacing removed SacI site
195 <220> FEATURE:
196 <221> NAME/KEY: misc_feature
197 <222> LOCATION: (439)..(444)
198 <223> OTHER INFORMATION: Stop codons added by PCR primer
200 <400> SEQUENCE: 3
201   atgaaaagaa tagtgccaaa gttcactgaa atcttccccg tggaggacgc gaactaccct 60
203   tacagcgcct tcatcgcgtc ggtccggaaa gacgtgatca aacactgcac cgaccataaa 120
205   gggatcttcc agcccggtgct gccaccggag aagaaggtcc cggagctatg gttctacaca 180
207   gaactgaaaa ctaggaccag ctccatcacg ctcgccatac gcatggacaa cctgtacctc 240
209   gtgggcttca ggaccccggg cggggtgtgg tgggagttcg gcaaggacgg cgacaccac 300
211   ctctcgggcg acaaccccag gtggctcggc ttcggcggca ggtaccagga cctcatcggc 360
213   aacaagggtc tggagaccgt caccatgggc cgcgccgaaa tgaccagggc cgtcaacgac 420

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215   ctggcgaaga agaagaagta ataa                                444
219 <210> SEQ ID NO: 4
220 <211> LENGTH: 354
221 <212> TYPE: DNA
222 <213> ORGANISM: Zea mays
224 <220> FEATURE:
225 <221> NAME/KEY: misc_feature
226 <222> LOCATION: (1)..(3)
227 <223> OTHER INFORMATION: Initiation codon added by PCR primer
229 <220> FEATURE:
230 <221> NAME/KEY: misc_feature
231 <222> LOCATION: (349)..(354)
232 <223> OTHER INFORMATION: Stop codons added by PCR primer
234 <400> SEQUENCE: 4
235   atggcggctg acccacaggc cgacacgaag agcaagctgg tgaagctggt ggtcatggtg 60
237   tgcgaggggc tgcggttcaa caccgtgtcc cgcacggtgg acgcgggggt caacagccag 120
239   cacggggtga ccttgaccgt gacgcagggg aagcaggtgc agaagtggga caggatctcc 180
241   aaggcggcct tcgagtgggc tgaccacccc accgctgtga tccccgacat gcagaagctt 240
243   ggcatacaag ataagaacga agcagcgagg atcgttgccg tcgttaagaa tcaaactact 300
245   gccgctgccg ctactgctgc cagtgtgtac aacgacgacg acgaggccta ataa          354
249 <210> SEQ ID NO: 5
250 <211> LENGTH: 43
251 <212> TYPE: DNA
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <223> OTHER INFORMATION: Description of Artificial Sequence: ProRIPBF
256   primer
258 <220> FEATURE:
259 <221> NAME/KEY: misc_feature
260 <222> LOCATION: (1)..(19)
261 <223> OTHER INFORMATION: Introduced restriction sites
263 <400> SEQUENCE: 5
264   actcgagtct agaggatcca tggccgagat aaccctagag ccg                                43
268 <210> SEQ ID NO: 6
269 <211> LENGTH: 49
270 <212> TYPE: DNA
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: Description of Artificial Sequence: ProRIPSR
275   primer
277 <220> FEATURE:
278 <221> NAME/KEY: misc_feature
279 <222> LOCATION: (1)..(19)
280 <223> OTHER INFORMATION: Introduced restriction sites
282 <400> SEQUENCE: 6
283   gactagtgtc gacgagctct tattaggcct cgtcgtcgtc gttgtcagc                                49
287 <210> SEQ ID NO: 7
288 <211> LENGTH: 47
289 <212> TYPE: DNA

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290 <213> ORGANISM: Artificial Sequence
292 <220> FEATURE:
293 <223> OTHER INFORMATION: Description of Artificial Sequence: RIP1BF primer
295 <220> FEATURE:
296 <221> NAME/KEY: misc_feature
297 <222> LOCATION: (1)..(19)
298 <223> OTHER INFORMATION: Introduced restriction sites
300 <400> SEQUENCE: 7
301   gctcgagtct agaggatcca tgaaaagaat agtgccaaag ttactg           47
305 <210> SEQ ID NO: 8
306 <211> LENGTH: 53
307 <212> TYPE: DNA
308 <213> ORGANISM: Artificial Sequence
310 <220> FEATURE:
311 <223> OTHER INFORMATION: Description of Artificial Sequence: RIP2SR primer
313 <220> FEATURE:
314 <221> NAME/KEY: misc_feature
315 <222> LOCATION: (1)..(19)
316 <223> OTHER INFORMATION: Introduced restriction sites
318 <400> SEQUENCE: 8
319   gactagtgtc gacgagctct tattaggcag cggcagtagt ttgattotta acg       53
323 <210> SEQ ID NO: 9
324 <211> LENGTH: 53
325 <212> TYPE: DNA
326 <213> ORGANISM: Artificial Sequence
328 <220> FEATURE:
329 <223> OTHER INFORMATION: Description of Artificial Sequence: RIP1SR primer
331 <220> FEATURE:
332 <221> NAME/KEY: misc_feature
333 <222> LOCATION: (1)..(19)
334 <223> OTHER INFORMATION: Introduced restriction sites
336 <400> SEQUENCE: 9
337   aactagtgtc gacgagctct tattacttct tcttcttcgc caggtcgttg acg       53
341 <210> SEQ ID NO: 10
342 <211> LENGTH: 51
343 <212> TYPE: DNA
344 <213> ORGANISM: Artificial Sequence
346 <220> FEATURE:
347 <223> OTHER INFORMATION: Description of Artificial Sequence: RIP2BF primer
349 <220> FEATURE:
350 <221> NAME/KEY: misc_feature
351 <222> LOCATION: (1)..(19)
352 <223> OTHER INFORMATION: Introduced restriction sites
354 <400> SEQUENCE: 10
355   actcgagtct agaggatcca tggcggctga cccacaggcc gacacgaaga g         51
359 <210> SEQ ID NO: 11
360 <211> LENGTH: 42
361 <212> TYPE: DNA
362 <213> ORGANISM: Artificial Sequence

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/978,273

DATE: 11/01/2001

TIME: 14:00:36

Input Set : A:\9341027999.txt

Output Set: N:\CRF3\11012001\I978273.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date